AUTHOR INDEX TO VOLUME 17

Issue	*Page*		
1	31	Ahlrichs, R.	Many body perturbation calculations and coupled electron pair models.
1	113	Aquilanti V.	On the computation of eigenenergies for potentials with a Coulomb tail.
3	321	Ardill, R.W.B.	Accurate Bessel functions Jn(z), Yn(z), H(1)n(z) and H(2)n(z) of integer order and complex argument.
3	301	Aurela, A.M.	Counting a small number of radioactive atoms, second program.
1	85	Balint-Kurti, G.G.	The rapid calculation of rotationally and vibrationally inelastic molecular collision cross sections.
3	305	Banuelos, A.	Extension to high frequencies of a program for calculating the angular distribution of nonrelativistic bremsstrahlung.
1	181	Berrington, K.	Recent developments in electron collision calculations.
3	305	Bilbao, L.	Extension to high frequencies of a program for calculating the angular distribution of nonrelativistic bremsstrahlung.
1	207	Brown, W.S.	Applications of symbolic algebraic computation.
1	175	Buckley, B.D.	R-matrix calculations for electron-molecule scattering.
1	xi	Burke, P.G.	Preface.
1	175	Burke, P.G.	R-matrix calculations for electron-molecule scattering.
1	27	Burton, B.	Calculation of hyperfine coupling constants using second order double perturbation theory and the configuration interaction method.
3	317	Calinon, R.	Application of the generalized backward substitution method to solve a class of linear systems.
3	239	Carver, M.B.	FORSIM VI: a program package for the automated solution of arbitrarily defined differential equations.
3	217	Chamayou, J.M.F.	Numerical experiments in identification of parameters in differential and partial differential equations.
3	233	Cheng, C.Z.	Electrostatic and magnetostatic particle simulation models in three dimensions.
4	397	Christiansen, J.P.	CASTOR 2: a two-dimensional laser target code.
4	357	Christie, M.A.	A bicubic spline interpolation of unequally spaced data.
1	27	Claxton, T.A.	Calculation of hyperfine coupling constants using second order double perturbation theory and the configuration interaction method.

Issue	*Page*		
3	283	Coleman, J.P.	De Vogelaere's method with automatic error control.
4	393	Collocott, S.J.	Adaptation: numerical solution of the Kramers-Kronig transforms by trapezoidal summation as compared to a Fourier method.
1	117	Connor, J.N.L.	Reactive molecular collision calculations.
1	145	Connor, J.N.L.	Quasiclassical smooth sampling study of threshold behaviour for the collinear reaction X + F2 - XF + F (X = Mu,H,D,T).
1	181	Crees, M.	Recent developments in electron collision calculations.
1	81	Davies, D.W.	A computational study of the effect of the interaction potential for inelastic atom-molecule rotational scattering.
3	227	Dawson, J.M.	Splines and high order interpolations in plasma simulations.
4	337	Deutsch, M.	Slit height smearing correction in small angle X-ray scattering I: intensity correction program.
4	345	Deutsch, M.	Slit height smearing correction in small angle X-ray scattering II: computation of the correction function.
1	51	Dickinson, A.S.	Non-reactive heavy particle collision calculations.
1	23	Douady, J.	A quadratically convergent SCF procedure.
1	23	Ellinger, Y.	A quadratically convergent SCF procedure.
1	27	Ellinger, Y.	Calculation of hyperfine coupling constants using second order double perturbation theory and the configuration interaction method.
1	85	Eno, L.	The rapid calculation of rotationally and vibrationally inelastic molecular collision cross sections.
4	424	Gaussorgues, C.	Erratum notice. Multistate molecular treatment of atomic collisions in the impact parameter approximation. I. Integration of coupled equations and calculation of transition amplitudes for the straight line case.
4	426	Godefroid, M.	Erratum notice. An adaptation of ACRZ to calculate electric quadrupole oscillator strengths.
1	149	Grant, I.P.	Relativistic atomic structure calculations.
4	423	Hansen, F.Y.	Erratum notice. II. A program for computing normal modes of molecules, crystal phonon dispersion relations and structure factors for neutron inelastic scattering.
1	207	Hearn, A.C.	Applications of symbolic algebraic computation.
1	171	Holt, A.R.	The calculation of certain second Born integrals.
4	383	Jesshope, C.R.	SIPSOL: a suite of subprograms for the solution of the linear equations arising from elliptic partial differential equations.
1	99	Kelly, H.P.	Many body perturbation calculations of photoionization.
4	375	Kolbig, K.S.	A program for solving systems of homogeneous linear inequalities.
4	413	Kunc, K.	Lattice dynamics of zincblende structure compounds II. Shell model.
1	113	Lagana, A.	On the computation of eigenenergies for potentials with a Coulomb tail.
1	145	Lagana, A.	Quasiclassical smooth sampling study of threshold behaviour for the collinear reaction X + F2 - XF + F (X = Mu,H,D,T).

Issue	*Page*		
3	233	Lee, W.W.	Electrostatic and magnetostatic particle simulation models in three dimensions.
1	23	Levy, B.	A quadratically convergent SCF procedure.
1	89	Light, J.C.	R-matrix propagation methods in inelastic and reactive collisions.
3	317	Ligou, J.	Application of the generalized backward substitution method to solve a class of linear systems.
3	227	Lin, A.T.	Splines and high order interpolations in plasma simulations.
3	227	Lin, C.C.	Splines and high order interpolations in plasma simulations.
3	283	Mohamed, J.	De Vogelaere's method with automatic error control.
3	321	Moriarty, K.J.M.	Accurate Bessel functions Jn(z), Yn(z), H(1)n(z) and H(2)n(z) of integer order and complex argument.
4	357	Moriarty, K.J.M.	A bicubic spline interpolation of unequally spaced data.
1	163	Nesbet, R.K.	Matrix variational calculations of electron-atom scattering.
4	413	Nielsen, O.H.	Lattice dynamics of zincblende structure compounds II. Shell model.
3	227	Okuda, H.	Splines and high order interpolations in plasma simulations.
3	233	Okuda, H.	Electrostatic and magnetostatic particle simulation models in three dimensions.
4	424	Piacentini, R.D.	Erratum notice. Multistate molecular treatment of atomic collisions in the impact parameter approximation. I. Integration of coupled equations and calculation of transition amplitudes for the straight line case.
4	425	Piacentini, R.D.	Erratum notice. Multistate molecular treatment of atomic collisions in the impact parameter approximation. III - Integration of coupled equations and calculation of transition amplitudes for Coulomb trajectories.
1	1	Reinhardt, W.P.	Lxx2 discretization of atomic and molecular electronic continua: moment, quadrature and J-matrix techniques.
3	305	Rodriguez-Trelles, F.	Extension to high frequencies of a program for calculating the angular distribution of nonrelativistic bremsstrahlung.
4	424	Salin, A.	Erratum notice. Multistate molecular treatment of atomic collisions in the impact parameter approximation. I. Integration of coupled equations and calculation of transition amplitudes for the straight line case.
4	425	Salin, A.	Erratum notice. Multistate molecular treatment of atomic collisions in the impact parameter approximation. III - Integration of coupled equations and calculation of transition amplitudes for Coulomb trajectories.
1	89	Schmalz, T.G.	R-matrix propagation methods in inelastic and reactive collisions.
4	375	Schwarz, F.	A program for solving systems of homogeneous linear inequalities.
1	47	Silver, D.M.	Diagrammatic many-body perturbation expansion for atoms and molecules: IV. Fourth-order linked diagrams involving quadruply-excited states.

Issue	*Page*		
1	89	Stechel, E.B.	R-matrix propagation methods in inelastic and reactive collisions.
4	365	Stern, M.S.	An integral equation program to calculate radial wave functions and scattering phase shifts of short-range local interactions.
1	23	Subra, R.	A quadratically convergent SCF procedure.
4	351	Takemasa, T.	Coulomb functions with complex angular momenta.
4	351	Tamura, T.	Coulomb functions with complex angular momenta.
1	81	Till, S.J.	A computational study of the effect of the interaction potential for inelastic atom-molecule rotational scattering.
4	393	Troup, G.J.	Adaptation: numerical solution of the Kramers-Kronig transforms by trapezoidal summation as compared to a Fourier method.
1	175	Vo Ky Lan	R-matrix calculations for electron-molecule scattering.
3	309	Von Meerwall, E.D.	A Fortran program to interpret pulsed field-gradient spin-echo diffusion data.
1	89	Walker, R.B.	R-matrix propagation methods in inelastic and reactive collisions.
1	47	Wilson, S.	Diagrammatic many-body perturbation expansion for atoms and molecules: IV. Fourth-order linked diagrams involving quadruply-excited states.
4	397	Winsor, N.K.	CASTOR 2: a two-dimensional laser target code.
4	351	Wolter, H.H.	Coulomb functions with complex angular momenta.

PROGRAM INDEX TO VOLUME 17

Atomic Physics

Issue	*Page*	*Cat.no.*	
3	305	ACYJ	0001 BREMSSTRAHLUNG INTENSITY 2 (Fortran). Extension to high frequencies of a program for calculating the angular distribution of nonrelativistic bremsstrahlung. A. Banuelos, F. Rodriguez-Trelles and L. Bilbao.
4	365	AAIE	SCHRODINTEQN (Fortran). An integral equation program to calculate radial wave functions and scattering phase shifts of short-range local interactions. M.S. Stern.
4	424	ACWJ	000B CORRECTION 28/03/79 (Fortran). Multistate molecular treatment of atomic collisions in the impact parameter approximation. I. Integration of coupled equations and calculation of transition amplitudes for the straight line case. C. Gaussorgues, R.D. Piacentini and A. Salin.
4	425	ACWU	000A CORRECTION 28/03/79 (Fortran). Multistate molecular treatment of atomic collisions in the impact parameter approximation. III - Integration of coupled equations and calculation of transition amplitudes for Coulomb trajectories. R.D. Piacentini and A. Salin.
4	426	ACRZ	A00ACORRECTION TO 0001 01/03/79 (Fortran). An adaptation of ACRZ to calculate electric quadrupole oscillator strengths. M. Godefroid.

Crystallography

4	337	AASB	CORECTEX (Fortran). Slit height smearing correction in small angle X-ray scattering I: intensity correction program. M. Deutsch. Subroutine required by this program (for data) is AASC 17(1979)345.
4	345	AASC	FFITEX (Fortran). Slit height smearing correction in small angle X-ray scattering II: computation of the correction function. M. Deutsch.

General Purpose

3	239	ACYZ	FORSIM VI (Fortran). FORSIM VI: a program package for the automated solution of arbitrarily defined differential equations. M.B. Carver.
3	283	ACZB	RADISH (Fortran). De Vogelaere's method with automatic error control. J.P. Coleman and J. Mohamed.
3	317	ACZJ	APICS (Fortran). Application of the generalized backward substitution method to solve a class of linear systems. R. Calinon and J. Ligou.
3	321	ACYQ	BESJYH (Fortran). Accurate Bessel functions Jn(z), Yn(z), H(1)n(z) and H(2)n(z) of integer order and complex argument. R.W.B. Ardill and K.J.M. Moriarty.

General Purpose (cont.)

Issue	*Page*	*Cat.no.*	
4	351	ABND	CCOULM (Fortran). Coulomb functions with complex angular momenta. T. Takemasa, T. Tamura and H.H. Wolter.
4	357	ACZG	BISPLN (Fortran). A bicubic spline interpolation of unequally spaced data. M.A. Christie and K.J.M. Moriarty.
4	375	ACZH	LIHOIN (Fortran). A program for solving systems of homogeneous linear inequalities. K.S. Kolbig and F. Schwarz.
4	383	ACZL	SIPSOL (Fortran). SIPSOL: a suite of subprograms for the solution of the linear equations arising from elliptic partial differential equations. C.R. Jesshope.

Laser Physics

4	397	ABUY	CASTOR 2 (Fortran). CASTOR 2: a two-dimensional laser target code. J.P. Christiansen and N.K. Winsor. Subroutines required by this program are ABUF 7(1974)245, ABUV 16(1978)129.

Molecular Physics

4	365	AAIE	SCHRODINTEQN (Fortran). An integral equation program to calculate radial wave functions and scattering phase shifts of short-range local interaction. M.S. Stern.
4	424	ACWJ	000B CORRECTION 28/03/79 (Fortran). Multistate molecular treatment of atomic collisions in the impact parameter approximation. I. Integration of coupled equations and calculation of transition amplitudes for the straight line case. C. Gaussorgues, R.D. Piacentini and A. Salin.
4	425	ACWU	000A CORRECTION 28/03/79 (Fortran). Multistate molecular treatment of atomic collisions in the impact parameter approximation. III - Integration of coupled equations and calculation of transition amplitudes for Coulomb trajectories. R.D. Piacentini and A. Salin.

Nuclear Physics

3	301	AAUY	COUNTING FEW RADIOACTIVE ATOMS/2 (Fortran). Counting a small number of radioactive atoms, second program. A.M. Aurela. See other version of this program AAUS 13(1977)281.
3	309	ABNE	DIFFUS2 (Fortran). A Fortran program to interpret pulsed field-gradient spin-echo diffusion data. E.D. von Meerwall.
4	365	AAIE	SCHRODINTEQN (Fortran). An integral equation program to calculate radial wave functions and scattering phase shifts of short-range local interactions. M.S. Stern.

Optics

4	393	ACMN	0001 TRAPZAL (Fortran). Adaptation : numerical solution of the Kramers-Kronig transforms by trapezoidal summation as compared to a Fourier method. S.J. Collocott and G.J. Troup.

Plasma Physics

4 397 ABUY CASTOR 2 (Fortran). CASTOR 2: a two-dimensional laser target code. J.P. Christiansen and N.K. Winsor. Subroutines required by this program are ABUF 7(1974)245, ABUV 16(1978)129.

Radiation Physics

3 305 ACYJ 0001 BREMSSTRAHLUNG INTENSITY 2 (Fortran). Extension to high frequencies of a program for calculating the angular distribution of nonrelativistic bremsstrahlung. A. Banuelos, F. Rodriguez-Trelles and L. Bilbao.

Solid State Physics

4 393 ACMN 0001 TRAPZAL (Fortran). Adaptation: numerical solution of the Kramers-Kronig transforms by trapezoidal summation as compared to a Fourier method. S.J. Collocott and G.J. Troup.

4 413 ACUC LATTICE DYNAMICS - SHELL MODEL (Fortran). Lattice dynamics of zincblende structure compounds II. Shell model. K. Kunc and O.H. Nielsen. Subroutine required by this program is ACMP 16(1979)181.

4 423 ACXR OOOA CORRECTION 22/12/78 (Fortran). II. A program for computing normal modes of molecules, crystal phonon dispersion relations and structure factors for neutron inelastic scattering. F.Y. Hansen.